

## **REMARKS**

Applicants certainly appreciate the assistance provided by the Examiner in the interview on February 23, 2005. As discussed in the interview, Applicants are filing an RCE to prosecute the non-elected method claims. The method claims were initially withheld pursuant to a restriction requirement. Applicants appreciate the Examiner allowing these claims to be examined by filing an RCE, rather than a divisional application.

Applicants respectfully submit that the method claims, as amended, distinguish over the references. Chapman discloses winding filaments on a mandrel. For example, Figure 5 shows a mandrel 190. Figure 9 shows mandrel 206 being wound with filaments 212. The individual mandrels that make up a particular structure are then placed side-by-side, and additional fibers then wound about the exterior of the assembly. The procedure is illustrated in Figure 13 and explained in a number of places, including column 4, line 67 – column 5, line 6. The filaments are pre-impregnated with resin prior to winding around the mandrels, as mentioned in column 14, line 56. As stated at various places, including column 5, lines 6-12, the assembly with the wound filaments is then placed into a mold and the resin co-cured. Column 5, line 9 states that for most applications, this process eliminates the need for vacuum bagging.

Claim 15 as amended requires braiding un-impregnated fibers into a tubular sock, each sock containing a mandrel. The filament winding technique of Chapman is entirely different from braiding. In the technique of this application, the mandrel is either inserted after braiding, or braiding is accomplished around the mandrel.

Also, claim 15 requires that the fibers be un-impregnated, which is opposite from Chapman. Claim 15 requires that a vacuum be formed inside the mold after the mandrels have been placed in

the mold. It then requires injecting resin into the mold to completely fill the void areas and to infuse the sock with resin. Chapman teaches away from vacuum bagging and also from resin infusing. Rather, Chapman teaches to wind fibers pre-impregnated with resin about the mandrel.

Pykiet also does not suggest injecting resin into the die. In Pykiet, the mandrels are wrapped with sheets of composite. There is no suggestion that the sheets could be braided fiber. Pykiet teaches to utilize pre-impregnation for both the sheets wrapped around the mandrels and the skin (column 2, line 46). Being pre-impregnated, there is no suggestion of vacuum bagging or infusing the sheets with resin in the mold.

Parsons, French patent 1,262,381, does not teach a braid either. Rather, Parsons teaches to wrap a piece of specially cut fabric (shown in Figure 7) around mandrel 37, shown in Figure 6. A wire is then used to hold the fabric in place around the mandrel. The mandrels are placed in a mold on a layer of the skin. After placing in the mold, a quantity of fluid plastic material (resin) is poured on the fabric. Then the mold halves are tightened together, which causes the fluid plastic material to extrude over and around the layers of reinforcing fabric. This is explained in the translation on page 4, third paragraph. Parsons does not suggest braided socks around the mandrels, nor infusing the braided socks with resin after drawing a vacuum inside a closed mold.

Applicants submit that the three references do not suggest the combination of braiding un-impregnated fibers into a tubular sock that contains a mandrel, placing the mandrels on a skin laid on a mold, placing a matched mold and a second skin on top of the mandrels, applying a compactive force, sealing the mold and drawing a vacuum in a mold, then injecting resin to infuse the socks with the resin.

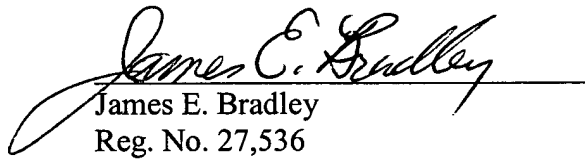
Claim 18 depends from claim 15 and further specifies that some of the plies of each of the skins be pre-impregnated with resin and other of the plies of each of the skins contain un-impregnated fibers. This is not suggested in the references. Claim 19 specifies that some of the plies are partially impregnated with resin, and others fully impregnated.

It is respectfully submitted that the claims are now in condition for allowance and favorable action is respectfully requested.

Respectfully submitted,

Date:

*April 11, 2005*

  
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